Day 79

Q. You are given a binary string S of length N. You can perform the following operation on S: Pick any set of indices such that no two picked indices are adjacent. Flip the values at the picked indices (i.e. change 0 to 1 and 1 to 0).

For example, consider the string S=1101101.
If we pick the indices {1,3,6}, then after flipping the values at picked indices, we will get 1?10?110?1→0111111.
Note that we cannot pick the set {2,3,5} since 2 and 3 are adjacent indices. Find the minimum number of operations required to convert all the characters of S to 0.

Input Format
The first line contains a single integer T - the number of test cases. Then the test cases follow.
The first line of each test case contains an integer N - the length of the binary string S.
The second line of each test case contains a binary string S of length N.

Output Format
For each test case, output the minimum number of operations required to convert all the characters of S to 0.

Sample Input
3
6
101001
5
00000
3
111

Sample Output
1
0
2

main.py

```
T = int(input())

for i in range(T):
    N = int(input())
    S = list(input())
    count = 0

    while(S.count('1')!=0):
        cnt = 0
        t = 0

        for i in range(N):
            if(t==1):
                t = 0
                continue
            elif(S[i]=='1'):
                cnt += 1
                S[i]='0'
                t = 1

    if(cnt!=0):
        count += 1

print(count)
```

output